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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,701	08/31/2001	Jun Kawaguchi	M 6712 HST/NI PCT/US	1007

423                      7590                      08/28/2002

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EXAMINER

OLTMANS, ANDREW L

ART UNIT	PAPER NUMBER
1742	5

1742

5

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

82W

**Office Action Summary**

<b>Application No.</b> 09/914,701	<b>Applicant(s)</b> KAWAGUCHI ET AL.	
<b>Examiner</b> Andr w L Qltmans	<b>Art Unit</b> 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.                      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-21 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-21 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All   b)  Some \* c)  None of:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a)  The translation of the foreign language provisional application has been received.
- 15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### *Speckmann et al. 5,703,733*

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speckmann et al. 5,703,733 (Speckmann).

Speckmann teaches a zinc phosphating solution having the following composition, which overlaps the composition, including the compositional equations, recited in instant claims 1-6, 12 and 14 (column 2):

- 50 a) phosphating solutions containing the following components are used:  
Zn<sup>2+</sup> cations in quantities of 0.1 to 5 g/l,  
PO<sub>4</sub><sup>3-</sup> anions in quantities of 5 to 50 g/l,  
NO<sub>3</sub><sup>-</sup> anions in quantities of 0.1 to 50 g/l and  
55 Mn<sup>2+</sup> cations in quantities of 0.1 to 5 g/l and  
Cu<sup>2+</sup> cations in quantities of 0.001 to 1 g/l,

Speckmann also teaches the addition of fluorine compounds, as recited in instant claim 7 (column 4, lines 47-49). Speckmann also teaches the process of coating metal substrates wherein the conditions overlap those recited in instant claims 8-10, 16-17 and 19-20 (column 2):

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- 60           b) the following conditions are established: pH value of the phosphating solutions 1.5 to 4.5, temperature of the phosphating solutions 10° to 80° C., treatment time 1 to 300 seconds,
- c) the workpieces are cathodically treated during phosphating with a direct current having a density of 0.01 to 100 mA/cm<sup>2</sup>.

[emphasis added by examiner]

Speckmann teaches that the process includes contacting the liquid composition with a counter electrode and causing an electric current to flow through the metal substrate and into the volume of the liquid composition, as recited in instant claim 8, 16 and 19 (column 3, lines 45-50).

Speckmann further teaches a pretreatment with the composition recited in instant claim 11, 18 and 21 (column 5, lines 34-41 and column 7, lines 26-30).

Speckmann fails to meet all the limitations of the instant claims in that Speckmann does not explicitly teach the exact compositional and process condition ranges instantly claimed.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional ranges and the process conditions taught by the reference overlaps that of the instant claims, In re Malagari, 182 USPQ 549, and MPEP 2144.05.

***Kanamaru et al. 5,525,431***

3.       Claims 1-10, 12-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamaru et al. 5,525,431 (Kanamaru).

Kanamaru teaches an electrolyte composition for electrolytically coating metal substrates wherein the electrolyte contains phosphoric acid, nitric acid and dissolved zinc cations in a concentration that overlaps the concentration, including the compositional equations, recited in

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instant claims 1-7, 12-15 (column 15):

Such oxide film can be prepared, for example, by dipping zinc-base galvanized sheet steel in an aqueous solution containing 1-70 g/l of potassium permanganate, 5-60 g/l of phosphoric acid or boric acid (when the two acids are used together, respectively 5-60 g/l) and 100-800 g/l of zinc nitrate, by subjecting the galvanized sheet steel to a cathode electrolytic treatment in said aqueous solution, or by spraying the aqueous solution onto the galvanized sheet steel, whereby Mn oxide, phosphoric acid and Zn oxide are formed simultaneously.

[emphasis added by examiner]

and

An etching agent, for example, at least one of sulfuric acid, nitric acid, perchloric acid, etc. is preferably added to the above-mentioned aqueous solution in an amount of 1-10 g/l to improve the adhesive property, etc. of the film.

[emphasis added by examiner]

(see also column 18, lines 19-51)

Kanamaru also teaches a process of coating metal substrates wherein the process conditions overlap those recited in the instant claims, as recited in instant claims 8-10, 16-17 and 19-20 (column 18, line 25 and 50). Kanamaru teaches that the process includes contacting the liquid composition with a counter electrode and causing an electric current to flow through the metal substrate and into the volume of the liquid composition, as recited in instant claims 8, 16 and 19 (column 20, line 63 to column 23, line 3 and column 22, lines 28-35).

Kanamaru fails to meet all of the limitations of the instant claims in that Kanamaru fails to explicitly teach the exact compositional and process condition ranges instantly claimed.

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4. However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional ranges and the process conditions taught by the reference overlaps that of the instant claims, In re Malagari, 182 USPQ 549, and MPEP 2144.05.

*Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Oltmans whose telephone number is 703-308-2594. The examiner can normally be reached 8:30-5:00 Monday-Friday.

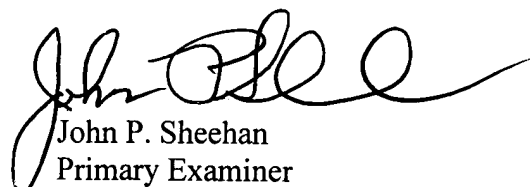
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*ALO*

ALO

August 16, 2002

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742